

<h2>Reception</h2>	Animals, including humans egg, chick, bird, caterpillar, cocoon, chrysalis, butterfly, frog spawn, tadpole, froglet, frog, grow, change, die, names of animals and their young, fur, feathers, scales, tail, wings, beak, claws, paws, hooves, swim, walk, run, jump, fly, patterns, spots, stripes, grow, change, baby, toddler, child, adult, old person, smell, taste, touch, feel, hear, see, blind, deaf	Sound sound, noise, loud, quiet, high, low, music, bang, blow, pluck, soft, hard, fast, slow, names of instruments	Electricity battery, plug, socket, electricity, wire, sound, light, move	Light light, torch, bulb, lamp, spotlight, shiny, bright, brighter, brightest, Sun, shine, glow, mirror	Living things and their habitats natural, plant, animal, leaves, seeds, conkers, acorns, twigs, bark, shells, feathers, pebbles, stones, same, different, pattern	Forces object, float, sink, water, up, down, top, bottom, push, pull, magnet, spring, squash, bend, twist, stretch, turn, spin, smooth, rough, fast, slow	Plants plant, leaf, stem, trunk, branch, root, bark, flower, petal, seed, berry, fruit, vegetable, bulb, plant, hole, dig, water, weed, grow, shoot, die, dead, soil	Materials mix, stir, cook, hot, oven, microwave, change, burn, melt, hard, runny, set, freeze, freezer, cold, blended, hard, soft, bendy, stiff, wobbly, wood, plastic, paper, card, fabric
	<h2>Year 1</h2>	Working Scientifically How do the season impact on what we do? (Seasons) Weather (sunny, rainy, windy, snowy etc.) Seasons (winter, summer, spring, autumn) Sun, sunrise, sunset, day length						
Autumn		Spring			Summer			
Which materials should the Three Little Pigs have used to build their house? (Materials) Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through		Why are humans not like tigers? (Animals, including humans) Head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves Names of animals experienced first-hand from each vertebrate group Parts of the body including those linked to PSHE teaching Senses – touch, see, smell, taste, hear, fingers (skin), eyes, nose, ear and tongue The children need to be able to name and identify a range of animals in each group e.g. name specific birds and fish. They do not need to use the terms mammal, reptiles etc. or know the key characteristics of each, although they will probably be able to identify birds and fish, based on their characteristics. The children also do not need to use the words carnivore, herbivore and omnivore. If they do, ensure that they understand that carnivores eat other animals, not just meat. Although we often use our fingers and hands to feel objects, the children should understand that we can feel with many parts of our body.	Which birds and plants would Little Red Riding Hood find in our park/school grounds? (Plants) Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud Names of trees in the local area – birch, ash, oak, sycamore, beech, maple Names of garden and wild flowering plants in the local area – Daffodil, Rose, daisy, cowbells, snowdrops, clovers, dandelions, thistle					

Year 2	Working Scientifically		
	Autumn	Spring	Summer
	<p>What materials is our school made of? (Materials) Names of materials – wood, metal, plastic, glass, brick, rock, paper, cardboard</p> <p>Properties of materials – opaque, transparent and translucent, reflective, nonreflective, flexible, rigid</p> <p>Shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching</p> <p>Why would a dinosaur not make a good pet? (Living Things and their habitats) Living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed</p> <p>Names of local habitats – Pond, lake, field, roadside, grass verge, Low Barnes, Riverside, shore</p> <p>Names of micro-habitats – under logs, in bushes, in log piles, underground</p>	<p>How will 5 a day help me be healthy? (Animals, including humans) Offspring, reproduction, growth, child, young/old stages (examples - chick/hen, baby/child/adult, caterpillar/butterfly), exercise, heartbeat, breathing, hygiene, germs, disease, food types (examples – meat, fish, vegetables, bread, rice, pasta)</p>	<p>How can we help the gardeners of the world? (Plants) Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud</p> <p>Names of trees in the local area – birch, ash, oak, sycamore, beech, maple</p> <p>Names of garden and wild flowering plants in the local area – Daffodil, Rose, daisy, cowbells, snowdrops, clovers, dandelions, thistle</p> <p>light, shade, sun, warm, cool, water, grow, healthy</p>
Year 3	Working Scientifically		
	Autumn	Spring	Summer
	<p>What do rocks tell us about the formation of the Earth? (Materials) Rock, stone, pebble, boulder, grain, crystals, layers, hard, soft, texture, absorb water, soil, fossil, marble, chalk, granite, sandstone, slate, soil, peat, sandy/chalk/clay soil</p>	<p>Are you attractive enough? (Forces and Magnets) Force, push, pull, twist, contact force, non-contact force, magnetic force, magnet, strength, bar magnet, ring magnet, button magnet, horseshoe magnet, attract, repel, magnetic material, metal, iron, steel, poles, north pole, south pole</p> <p>How did that blossom become an apple? (Plants) Photosynthesis, pollen, insect/wind pollination, seed formation, seed dispersal (wind dispersal, animal dispersal, water dispersal)</p>	<p>How far can you throw your shadow? (Light) Light, light source, dark, absence of light, transparent, translucent, opaque, shiny, matt, surface, shadow, reflect, mirror, sunlight, dangerous</p> <p>How can Usain Bolt move so quickly? (Animals, including humans) Nutrition, nutrients, carbohydrates, sugars, protein, vitamins, minerals, fibre, fat, water, skeleton, bones, muscles, joints, support, protect, move, skull, ribs, spine</p>
Year 4	Working Scientifically		
	Autumn	Spring	Summer
	<p>How could we cope without electricity for one day? (Electricity) Electricity, electrical appliance/device, mains, plug, electrical circuit, complete circuit, component, cell, battery, positive, negative, connect/connections, loose connection, short circuit, crocodile clip, bulb, switch, buzzer, motor, conductor, insulator, metal, non-metal, symbol</p> <p>Children in Year 4 do not need to use standard symbols for electrical components, as this is taught in Year 6.</p> <p>What happens to the food we eat? (Animals, including humans) Digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, nutrients, large intestine, rectum, anus, teeth, incisor, canine, molar, premolars, herbivore, carnivore, omnivore, producer, predator, prey, food chain</p>	<p>Why are the sounds that 'One Direction' make enjoyed by so many? (Sounds) Sound, source, vibrate, vibration, travel, pitch (high, low), volume, faint, loud, insulation</p>	<p>How would we survive without water? (Materials) Solid, liquid, gas, state change, melting, freezing, melting point, boiling point, evaporation, temperature, water cycle</p> <p>Which wild animals and plants thrive in your locality? (Living things and their habitats) Classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate</p>
Year 5	Working Scientifically		
	Autumn	Spring	Summer
	<p>GSK Project</p> <p>What is our place in the universe? (Earth and Space) Earth, Sun, Moon, (Mercury, Jupiter, Saturn, Venus, Mars, Uranus, Neptune), spherical, solar system, rotates, star, orbit, planets</p>	<p>Can you feel the force? (Force) Force, gravity, Earth, air resistance, water resistance, friction, mechanisms, simple machines, levers, pulleys, gears</p> <p>Could you be the next CSI investigator? (Materials) Thermal/electrical insulator/conductor, change of state, mixture, dissolve, solution, soluble, insoluble, filter, sieve, reversible/non-reversible change, burning, rusting, new material</p>	<p>Do all animals and plants start life as an egg? (Living things and their habitats) Life cycle, reproduce, sexual, sperm, fertilises, egg, live young, metamorphosis, asexual, plantlets, runners, bulbs, cuttings</p> <p>How different will you be when you are as old as your grandparents? (Animals, including humans) Puberty – the vocabulary to describe sexual characteristics</p>

Year 6

Working Scientifically		
Autumn	Spring	Summer
GSK Project	Could you be the next Nintendo apprentice? (Electricity) Circuit, complete circuit, circuit diagram, circuit symbol, cell, battery, bulb, buzzer, motor, switch, voltage Children do not need to understand what voltage is, but will use volts and voltage to describe different batteries. The words "cells" and "batteries" are now used interchangeably.	How can you light up your life? (Light) Light, plus straight lines, light rays
What would a journey through your body look like? (Animals, including humans) Heart, pulse, rate, pumps, blood, blood vessels, transported, lungs, oxygen, carbon dioxide, nutrients, water, muscles, cycle, circulatory system, diet, exercise, drugs, lifestyle	Have we always looked like this? (Evolution and inheritance) Offspring, sexual reproduction, vary, characteristics, suited, adapted, environment, inherited, species, fossils	Could Spiderman really exist? (Living things and their habitats) Vertebrates, fish, amphibians, reptiles, birds, mammals, invertebrates, insects, spiders, snails, worms, flowering, non-flowering